

GORSHKOV, A.A., otv. red.; TSIZIN, B.B., inzh., red.; NOVIKOV, F.A., inzh., red.; REMENNIK, T.K., red. izd-va; KADASHEVICH, O.A., tekhn. red.

[Hot working of metals; transactions of the Scientific-Technical Conference on the Development of the Production Forces of the Kiev Economic Region] Goriachaia obrabotka metallov; trudy nauchno-tekhnicheskoi konferentsii po voprosam razvitiia proizvoditel'nykh sil Kievskogo ekonomicheskogo raiona. Kiev, Izd-vo Akad. nauk USSR. No.2. 1960. 142 p. (MIRA 14:7)

1. Nauchno-tekhnicheskaya konferentsiya po voprosam razvitiya proizvoditel'nykh sil Kiyevskogo ekonomicheskogo rayona. 2. Chlen-korrespondent AN USSR, Institut liteynogo proizvodstva AN USSR (for Gorshkov).  
(Founding) (Forging) (Rolling (Metalwork)) (Metals--Hardening)

TSIZIN, I.G., inzh.; KOZHEVNIKOV, N.N., inzh.

Consolidated equipment units of hydroelectric power stations.  
Gidr. stroi. 32 no.5:35-36 My '62. (MIRA 15:5)  
(Hydroelectric power stations)

L 09085-67

ACC NR: AP7002376

SOURCE CODE: UR/0104/66/000/007/0030/0033

AUTHOR: Potashnik, S. I. (Engineer); Kalmykov, I. Z. (Engineer); Stroganov, Ye. M. (Engineer); Kozhevnikov, N. N.; Tsizin, N. G. (Engineer); Papanov, A. V. (Engineer); Beschastnov, G. A. (Engineer); BaLakirev, V. F. (Engineer)

ORG: none

TITLE: Increasing the power effectiveness of horizontal capsule hydroelectric units

SOURCE: Elektricheskiye stantsii, no. 7, 1966, 30-33

TOPIC TAGS: hydroelectric power plant, electric power production

ABSTRACT: At the Kiev Hydroelectric Station, which was the first low pressure hydroelectric station with horizontal capsule hydroelectric units in the country, the usage of these horizontal units allowed a reduction in cost of construction and installation operations in comparison with vertical units of 20-25%. This article presents an evaluation of the power qualities of the capsule hydroelectric units on the basis of results of usage and investigations performed, as well as some suggestions for increasing those qualities. The author concludes that the horizontal capsule unit can operate normally in the synchronous compensator mode with a power of 1.5 Mvar without removal of water from the reflex condensation chamber. The thermal state of the rotor windings allows operation with a power coefficient less than unity, which provides for distribution of the reactive power in peak hours and increases the static stability of the capsule hydrogenerators. The usage of capsule generators in the synchronous compensation mode is economically justified. Orig. art. has: 3 figures. [JPRS: 37,564]

SUB CODE: 10 / SUBM DATE: none

Card 1/1<sup>6p</sup>

UDC: 62.224-131.2

0925

0682

TSIZIN, S.G.

New developments in the designing of sugar factories. Sakh. prom.  
33 no.1:42-44 Ja '59. (MIRA 12:1)

1.Gipresakhar.  
(Sugar industry)

TSIZIN, Yu.S.; PREOBRAZHENSKIY, N.A.

Diphenyl ethers. Part 3: Acyl rearrangement in the series  
of substituted diphenyl ethers. Zhur.ob.khim. 32 no.10:3290-3294  
0 '62. (MIRA 15:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii  
imeni M.V. Lomonosova.

(Phenyl ether)  
(Rearrangements (Chemistry))

**"APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757120015-2**

**APPROVED FOR RELEASE: 03/14/2001**

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**APPROVED FOR RELEASE: 03/14/2001**

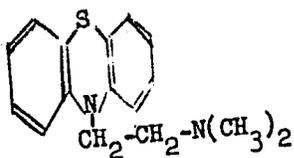
**CIA-RDP86-00513R001757120015-2"**

2. Synthesis of Aminazine and Other Phenothiazine Derivatives

"On the Synthesis of Aminazine and Its Analogues," by N. M. Shchukina, N. V. Savitskaya, and Yu. S. Tsizin, All-Union Scientific-Research Chemicopharmaceutical Institute imeni S. Ordzhonikidze, Meditinskaya Promyshlennost' SSSR, Vol 11, No 3, Mar 57, pp 20-24

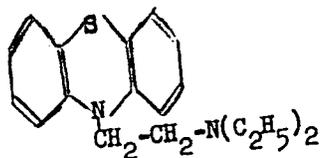
This article describes a method of synthesizing aminazine and its analogues--etizine, dinezine, diprozine, and mul'tezine -- all phenothiazine derivatives. All have been found to possess important pharmacological properties, i.e., they act as spasmolytics and sedatives, affect the

central nervous system, and are used as therapeutic agents in nervous diseases and in the practice of psychiatry. Aminazine is the only one of the group of phenothiazine derivatives in which there is substitution in the nucleus. In all other cases, only the nitrogen is replaced by N-alkylaminoalkyl radicals. They are easily synthesized by the heating of phenothiazine with haloalkyl-aminoalkyl compounds and alkaline reagents. The best results are obtained when condensation is carried out with sodium hydroxide, with the water and immiscible solvents -- benzene and toluol -- being continuously drained off, a method developed at the experimental plant of the All-Union Scientific-Research Chemicopharmaceutical Institute by L. I. Morozovskaya and M. A. Vorob'yev. N-dialkylaminoalkylphenothiazines are obtained having the following structural formulas:



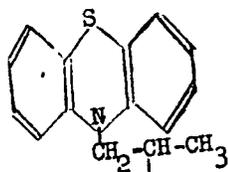
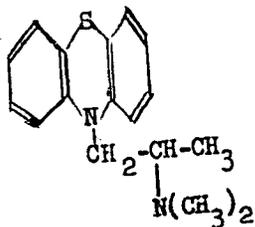
HCl

Etizine (anergan)



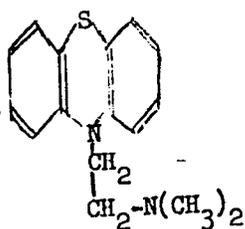
HCl

Dinezine (diparkol)



HCl

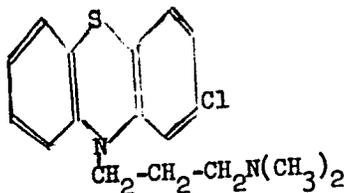
Diprozine (fenegan)



HCl

Promazine

Parfezine (parsidol)



HCl

Aminazine (largactile,  
Chlorpromazine)

TSIZIN, Yu.S.

GORTINSKAYA, T.V.; SAVITSKAYA, N.V.; SAMOLOVOVA, V.G.; TSIZIN, Yu.S.;  
SHCHUKINA, M.N.

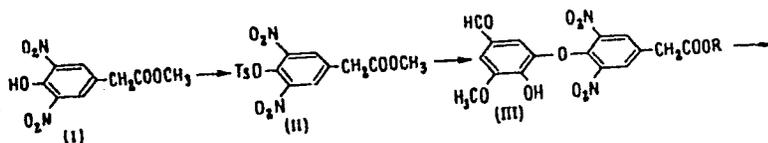
Obtaining dimethylaminopropanol from ethylene cyanohydrin. Med.  
prom. 11 no. 4: 23-25. Ap. '57. (MIRA 10:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy  
institut imeni S. Ordzhonikidze.  
(PROPANOL) (HYDRACRYLONITRILE)

5.3610,5.3950

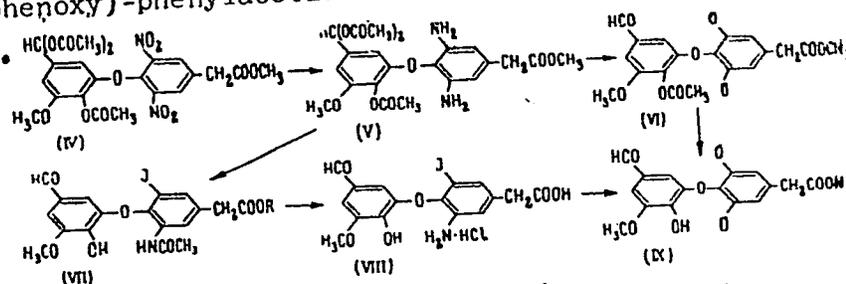
77874  
SOV/79-30-2-25/78

**AUTHORS:** Tsizin, Yu. S., Preobrazhenskiy, N. A.  
**TITLE:** Investigation in the Field of Diphenyl Ethers. Synthesis of 3,5-Diiodo-4-(2'-hydroxy-3'-methoxy-5'-formylphenoxy)-phenylacetic Acid  
**PERIODICAL:** Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 479-483 (USSR)  
**ABSTRACT:** Synthesis of above acid (IX) was conducted as follows:



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Investigation in the Field of Diphenyl Ethers. 77874  
 SOV/79-30-2-25/78  
 Synthesis of 3,5-Diiodo-4-(2'-hydroxy-3'-methoxy-5'-formylphenoxy)-phenylacetic Acid



Methyl 3,5-dinitro-4-(2'-hydroxy-3'-methoxy-5'-formylphenoxy)phenylacetate (I) was prepared from 3,5-dinitro-4-hydroxyphenylacetic acid and anhydrous methanol, in the presence of conc  $H_2SO_4$ , in 89% yield (mp  $80-81^\circ$ ). (II) was obtained from (I) and p-toluenesulfonyl chloride in the presence of dimethyl-aniline, in 65.8% yield (mp  $149-150^\circ$ ). (III) (R =  $CH_3$ ) was obtained from (II) and 3-O-methylgallic aldehyde, in 43% yield ( $154-155^\circ$ ). (IV) was prepared from (III) and

Card 2/4

Investigation in the Field of Diphenyl Ethers. 77874  
Synthesis of 3,5-Diiodo-4-(2'-hydroxy-3'-  
methoxy-5'-formylphenoxy)-phenylacetic Acid SOV/79-30-2-25/78

acetic anhydride, in the presence of conc  $H_2SO_4$ , in 97% yield (mp 131.5-132.5°, alcohol). (V) was prepared by hydrogenation of (IV) over Raney Ni, in 96.7% yield (mp 153-154°). (VI) was prepared from (V) and phosphoric acid (d 1.7),  $NaNO_2$ ,  $H_2SO_4$ , KI,  $I_2$ , water, and chloroform, in 36.6% yield. For the preparation of (VII), (V) and glacial acetic acid were added to the mixture of  $NaNO_2$  and  $H_2SO_4$  (d 1.84). The reaction mass was added to a mixture of KI,  $I_2$ , urea, water, and chloroform, and after 5 minutes (VII) was obtained in 51.3% yield (mp 227-229°). (VIII) was obtained from (VII) and a mixture of glacial acetic acid, HCl (d 1.19) and water. (VIII) was added to the mixture of  $H_2SO_4$  (d 1.84), glacial acetic acid, and  $NaNO_2$ . (IX) was obtained in 15.4% yield (mp 118-121°) by addition of the above reaction mass to the mixture

Card 3/4

Investigation in the Field of Diphenyl Ethers.  
Synthesis of 3,5-Diiodo-4-(2'-hydroxy-3'-  
methoxy-5'-formylphenoxy)-phenylacetic Acid

77874

SOV/79-30-2-25/78

of KI, I<sub>2</sub>, urea, water, and chloroform. (IX) was  
obtained also from (VI), glacial acetic acid, and  
HCl (d 1.19) in 92.4% yield (mp 117-120°). There are  
5 references, 3 U.K., 2 French. The U.K. references  
are: R. Pitt-Rivers, O. Thibault, Lancet, I, 285 (1955);  
J. H. Wilkonson, Bloch. J., 601 (1956); W. Bradley,  
R. Robinson, G. Schwarzenbach, J. Chem. Soc., 793 (1930).

ASSOCIATION: Moscow Institute of Fine Chemicals Technology (Moskovskiy  
institut tonkoy khimicheskoy tekhnologii)

SUBMITTED: January 31, 1959

Card 4/4

TSIZIN, Yu.S.; RUBTSOV, M.V.

$\omega$ -Aminoacylhydroquinones. Part 1: Synthesis of  
2,5-dihydroxy(methoxy)- $\beta$ -aminopropiophenone. Zhur. org. (MIRA 18:11)  
khim. 1 no.7:1260-1264 JI '65.

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy  
institut imeni S.Ordzhonikidze.

TOLKACHEV, O.N.; TSIZIN, Yu.S.; BELOUSOVA, M.A.; PREOBRAZHENSKIY, N.A.

Ultraviolet spectra and structure of diphenyl ethers. Zhur.ob.khim.  
31 no.9:2987-2991 S '61. (MIRA 14:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
M.V.Lomonosova. (Biphenyl) (Ethers--Spectra)

TSIZIN, YU. S., CAND CHEM SCI, "SYNTHETIC INVESTIGATIONS  
IN THE FIELD OF DIPHENYL ESTERS." MOSCOW, 1961. (MIN OF  
HEALTH USSR. ALL-UNION SCI RESEARCH CHEM ~~AND~~ PHARMACEUTICAL  
INST IMENI S. ORDZHONIKIDZE "VNIKHFI"). (KL-DV, 11-61, 211).

-50-

TSIZIN, Yu.S.; PREOBRAZHENSKIY, N.A.

Biphenyl ethers. Part 2: Synthesis of 2-oxy-2',3-dimethoxy-4',5-diformyl biphenyl ether. Zhur. ob. khim. 32 no.1:132-135 Ja '62. (MIRA 15:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova. (Ether)

TSIZLING, N.I.

New geophysical instruments and equipment. Razved. i okh.  
nedr 29 no.5:26-29 My '63. (MIRA 16:7)

1. Leningradskoye osoboye konstruktorskoye byuro.  
(Geophysical instruments)

TSKACHENKO, V.N., mayor meditsinskoy sluzhby

Shortcomings in the prevention and treatment of  
paratonsillar abscesses in units. Voen.-med. zhur.  
no.4:81 Ap '61. (MIRA 15:6)

(RESPIRATORY ORGANS--DISEASES)

GEL'DFEL'D, B.S.; TSKHADADZE, G.O.

Collectors with plastic hulls for use in electric machines. Elek.  
i tepl. tiaga 7 no.6:5-6 Je '63. (MIRA 16:9)

1. Nachal'nik konstruktorskogo byuro Tbilisskogo elektrozostroitel'-  
nogo zavoda im. V.I.Lenina (for Gel'dfel'd). 2. Nachal'nik  
tekhnologicheskogo byuro Tbilisskogo elektrozostroitel'nogo  
zavoda im. V.I.Lenina (for Tskhadadze).  
(Electric machinery)

KHOKHLOV, M.Z.; BULKIN, P.S.; MITSUK, V.Ye.; TSKAYEVA, T.F.

Effect of radioactive irradiation on the formation of a pulse  
superhigh-frequency discharge. Radiotekh. i elektron. 3 no.5:  
704-709 My '58. (MIRA 11:6)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta  
im. M.V. Lomonosova.  
(Electric discharges) (Radioactivity)

USSR/Cultivated Plants - Fodders.

M.

Abs Jour : Ref Zhur - Biol., No 13, 1950, 14150

2 centners/ha of K the yield was 33.5 and 2.75 centners/ha respectively. In the production-experimental sowings without cover and under the oats and wheat cover high yields were obtained in the course of a number of years as follows: hay in 2 mowings - 41-58 centners/ha; seeds in an average of 2 centners/ha. -- V.M. Kashmanova

Card 2/2

S/079/60/030/05/53/074  
B005/B125

AUTHORS: Minkin, V. I., Ardashov, B. I., Tskhadadze, K. A.

TITLE: The Condensation of Diaryl Amines With Isovaleraldehyde

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 5, pp. 1647-1649

TEXT: The synthesis of several previously unknown derivatives of N-aryl-2-isobutyl-3-isopropyl quinolines is described in the present report. The derivatives named were isolated in the form of their perchlorates. The production was carried out according to the Doebner-Miller reaction by the condensation of secondary aromatic amines with the aldehyde of the iso-valeric acid. The mechanism of this reaction was already investigated previously (Refs. 1, 2). The authors assume that the ring closure in asymmetrical diaryl amines occurs towards the more strongly nucleophilic aryl group. This assumption is in accord with the data of G. T. Pilyugin (Ref. 4). The reaction according to Doebner-Miller was also applied to secondary aliphatic-aromatic amines. The N-methyl quinaldinium perchlorate formed in negligible amount in the corresponding reaction of the methyl aniline. The formation of this product can be explained by the decomposition

Card 1/3

The Condensation of Diaryl Amines With  
IsovaleraldehydeS/079/60/030/05/53/074  
B005/B125

of the intermediately forming dimer of the vinyl methyl aniline under the separation of methane (vide also Refs. 8, 9). The schemata of the formation of the normal reaction product and the by-product mentioned are given. The reaction worked out by the authors can be carried out on the one hand with various aromatic and aliphatic-aromatic secondary and acylated primary amines, and on the other hand with various aliphatic aldehydes; and it can generally be used for the synthesis of arylates and alkylates of quinaldine and of 2,3-dialkylquinoline. Nitrobenzene or another polar solvent can be used as a solvent. *o*-Nitrodiphenylamine, 2,4-dinitrodiphenylamine, and *N*-phenylanthranilic acid form no quinolinium salts, since these amines are too weakly basic. Also indole forms no quinolinium salt. All of the syntheses carried out are thoroughly described in the experimental section. The yield, melting point, and chlorine content are given for each synthesized product. The influence of the solvent on the yield of *N*-phenylquinaldinium perchlorate is given in a summary. There are 9 references, 6 of which are Soviet.

Card 2/3

The Condensation of Diaryl Amines With Iso-  
valeraldehyde

S/079/60/030/05/53/074  
B005/B125

ASSOCIATION: Rostovskiy-na-Donu gosudarstvennyy universitet (Rostov-na-  
Donu State University) ✓

SUBMITTED: May 4, 1959

Card 3/3

Def. at  
Tbilisi State U.

- და სისტემი დიფერენციალური ურავნი  
სადაც სფერული ფორმის მიხედვით  
კომპლექსური ფუნქციის კომპლექსური  
რეალური და სფერული ფორმის კომპლექსური  
1952. 58 ს. (ტრ. ITU, v. 52, 1954).  
Заг. 1953, 25.4.
- 706. ნაქვედო სფერული ფორმის  
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1941. 14, 14(1).
- 707. ნაქვედო სფერული ფორმის  
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1945. 49 ს.
- 708. ნაქვედო სფერული ფორმის  
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- 709. ნაქვედო სფერული ფორმის  
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1945. 49 ს.
- 710. ნაქვედო სფერული ფორმის  
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1945. 49 ს.
- 711. ნაქვედო სფერული ფორმის  
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1945. 49 ს.
- 712. ნაქვედო სფერული ფორმის  
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- 713. ნაქვედო სფერული ფორმის  
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- 714. ნაქვედო სფერული ფორმის  
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1945. 49 ს.

623  
Dissertation for degree of  
Candidate Mathematical Sciences

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. M  
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104781  
AUTHOR : Takhakaya, K., Takhadaya, E.  
INST. : -  
TITLE : Hybrid of Sunflower and Jerusalem Artichoke.  
ORIG. PUB. : Sakarvelos kolneurne, 1958, No. 12  
ABSTRACT : No abstract.

CARD: 1/1

106

16.3400

32174

S/044/61/000/010/040/051  
C111/C222

AUTHOR: Tskhadaya, F.G.

TITLE: The error estimation of the numerical solution of an ordinary differential equation of first order in the complex region

PERIODICAL: Referativnyy zhurnal. Matematika, no. 10, 1961, 38, abstract 10 V 228. ("Tr. Vychisl. tsentra. AN Gruz SSR", 1960, 1, 231-243)

TEXT: The author investigates the question of the numerical integration of ordinary differential equations

$$\frac{dw}{dz} = \varphi(z, w)$$

in a rectangular complex region with the initial conditions  $z = z_0$ ,  $w = w_0$ . The region of integration is covered with a quadratic net, and the solution is sought in the following stages: 1) Determination of the solution in s first knots of the zero line with the aid of the Card 1/2

32474

S/044/61/000/010/040/051  
C111/C222

The error estimation of the ...

Taylor development ; 2) determination of the solution in the other knots of the zero line with the aid of a formula of the type of Adam ; 3) determination of the solution in the other knots of the rectangular region with the aid of a formula for a numerical integration with complex coefficients. The author gives an error estimation from which there follows the convergence of the calculation process.

[Abstracter's note : Complete translation.]

Card 2/2

16.3400

32475

S/044/61/000/010/041/051  
C111/C222

AUTHOR: Tskhadaya, F.G.

TITLE: Numerical integration of a system of ordinary differential equations of first order in the complex region

PERIODICAL: Referativnyy zhurnal. Matematika, no. 10, 1961, 38, abstract 10 V 229. ("Tr. Vychisl. tsentra. AN Gruz SSR", 1960, 1, 245-262)

TEXT: With the aid of the integration formula of Hermite the author derives formulas with complex coefficients for systems of differential equations in the complex region. The author considers the same calculation process which was used for the numerical solution of a differential equation (abstract 10 V 228). He gives an estimation of the error which appears by the neglectation of the remainder term. 4

[Abstracter's note : Complete translation.]

Card 1/1

TSKHADADZE, G.B. i GVERDTSITELI, I.M.

24788. TSKHADADZE, G.B. i GVERDTSITELI, I.M. Deystviye Kontsentrirovannoy Solyanoy  
Kisloty Na Diatsetilenovyye Glikoli. Zhurnal Obshchey Khimii, 1949 Vyp. 7,  
S. 1315-17.--Bibliogr: S. 1317

GRACHEV, I.V. i KIRZNER, N.A.--Sm 24794

KIRZNER, N.A. i GRACHEV, I.V.--Sm 24794

SO: Letopis' No. 33, 1949

1ST AND 2ND ORDER      3RD AND 4TH ORDER

PROCESSES AND PROPERTIES INDEX

*TSKHADADZE G. V.*      *A II I*

**Action of concentrated hydrochloric acid upon diacetylenic styrols.**  
 I. M. Gverdtsiteli and G. V. Tskhadadze (*J. gen. Chem., U.S.S.R.*, 1946, 19, 1318-1317 [*U.S. transl.* 1311-1313]).—Treatment of 2 : 7-dimethylocta-3 : 5-diyne-2 : 7-diol with aq. HCl at 60–70° affords a mixture (48%) of 3 : 6-dichloro-2 : 7-dimethylocta-2 : 6-dien-4-yne,  $C_{10}H_{10}Cl_2$ , b.p. 64–67°/4 mm,  $d_{20}^{20} 0.863$ ,  $n_D^{20} 1.4477$ , and 2 : 7-dichloro-3 : 7-dimethylocta-3 : 5-diyne,  $C_{10}H_{10}Cl_2$ , m.p. 59.5–60°.  
 M. DAVIS.

ASR-51A METALLURGICAL LITERATURE CLASSIFICATION

E 2

COMMON ELEMENTS

COMMON SYMBOLS

COMMON ABBREVIATIONS

COMMON UNITS

COMMON SYMBOLS

COMMON UNITS

SHVANGIRADZE, M.D.; TSKHADADZE, K.A.; TARENKO, M.I.; GOGUADZE, V.P.

Increase of the sensitiveness of nitrogen detection by the  
Lassaigne method. Zhur. anal. khim. 18 no.11:1399-1400 N '63.  
(MIRA 17:1)

1. Institut prikladnoy khimii i elektrokhemii AN GruzSSR, Tbilisi.

Handwritten notes at the top of the page, possibly including a name or reference number.

5/019/60/030/CS/53/074  
8005/8125

Author: Markin, V. I., Ardanov, B. I., Galaktionov, E. A.

Title: The Condensation of Diaryl Amines with Isovaleraldehyde

Periodical: Izvestiya Akademiya Nauk SSSR, Ser. Khim., 1960, No. 5, pp. 1647-1649

Abstract: The synthesis of several previously unknown derivatives of 2-aryloxy-2-isopropyl quinolines is described in the present paper. The derivatives named were isolated in the form of their perchlorates. The production was carried out according to the Doebner-Miller reaction by the condensation of secondary aromatic amines with the aldehyde of the isovaleric acid. The mechanism of this reaction was already investigated previously (Ref. 1, 2). The authors assume that the ring closure in secondary diaryl amines occurs towards the more strongly nucleophilic nitrogen atom. This assumption is in accord with the data of G. E. Pridgin (Ref. 3). This reaction according to Doebner-Miller was also applied to secondary aliphatic amines. The 2-aryloxy quinolines perchlorate formed in negligible amount in the corresponding reaction of the secondary amines. The formation of this product can be explained by the decomposition

The Condensation of Diaryl Amines with Isovaleraldehyde  
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of the immediately forming dimer of the aryl ethyl amine under the reaction conditions (this also Refs. 4, 5). The scheme of the formation of the monomer (the product and the by-product mentioned are given). The reaction worked out on products can be carried out on the one hand with various aromatic and aliphatic secondary amines and on the other hand with various aliphatic aglycosylated primary amines, and it can generally be used for the synthesis of arylates and alkylates of quinoline and of 2,3-dialkylquinolines. Nitrobenzene or another polar solvent can be used as a solvent. 2-Methylimidazole, 2,4-dinitroimidazole, and 5-phenylimidazole acid form no quinolinium salts, since these amines are too weakly basic. Also indole forms no quinolinium salt. All of the syntheses carried out are thoroughly described in the experimental section. The yield, melting point, and optical content are given for each synthesized product. The influence of the reaction conditions on the yield of the perchlorate is given in a summary. There are 3 references, 6 of which are Soviet.

The Condensation of Diaryl Amines with Isovaleraldehyde  
5/019/60/030/CS/53/074  
8005/8125

ASSOCIATION: Koosterevskiy-na-Bosnu Gosudarstvennyy Universitet (Kostroma, Donau State University)

SUBMITTED: May 4, 1959

Card 5/5

MIMINOSHVILI, S.Ya., kand.med.nauk; BERIYA, F.Ye.; TSKHADAYA, A.D.;  
BAGATURIYA, Sh.K.

Active detection of glaucoma among the population of Sukhimi.  
Vest.oft. 72 no.6:4-5 N-D '59. (MIRA 13:5)

1. Glaznoye otdeleniye Respublikanskoy bol'nitsy imeni A.A.  
Ostroumova (zav. - S.Ya. Mimoshvili).  
(GLAUCOMA statist. prev. & control)

S/774/60/001/000/010/012

AUTHOR: Tskhadaya, F.

TITLE: The numerical integration of a system of ordinary differential equations of the first order in the complex region.

SOURCE: Akademiya nauk Gruzinskoy SSR. Vychislitel'nyy tsentr. Trudy. v. 1. 1960, 245-262.

TEXT: This paper, the body of which is presented in the Gruzian language with a brief Russian-language résumé, derives interpolational formulas for the numerical integration of a system of differential equations in a complex region with the aid of the Hermitian interpolation formulas with multiple points of interpolation. Evaluations of the errors incurred by the elimination of the residual terms of these formulas are given. From these evaluations it is apparent that, when the network step goes to zero, the error goes to zero, also. There are 6 references (2 Gruzian-language, of which 1 by the present author, 1 Russian-language Soviet; Gel'fond, A. O., *Ischisleniye konechnykh raznostey* (The calculus of finite differences), 1952, 2 French-language: Ceschino, F., *The approximate integration of differential equations*, C. R. Acad. Sci., v. 243, no. 20, 1956, and Goursat, E., *Course in mathematical analysis*, v. II, 1936, in Russian translation; and 1 English-language:

Card 1/2

The numerical integration of a system ...

S/774/60/001/000/010/012

Salzer, H. E., Formulas for numerical integration for first- and second-order differential equations in the complex plane. J. Math. Phys., v. 29, no. 3, 1950).

Card 2/2

ACCESSION NR: AR4039852

8/0044/64/000/004/B138/B138

SOURCE: Ref. zh. Matematika, Abs. 4B612

AUTHOR: Tskhadaya, F. G.

TITLE: Computation of the antiderivative of a function.

CITED SOURCE: Tr. Vy\*chisl. tsentra. AN GruzSSR, v. 3, 1962(1963), 49-68

TOPIC TAGS: function antiderivative, computation, Hermite polynomial, Milne's method

TRANSLATION: For the tabulation of the antiderivative of a function, it is necessary to compute the integral  $\int_{x_n}^{x_n+h} f(t)dt$

$$\int_{x_n}^{x_n+h} f(t)dt \tag{1}$$

In the original paper, formulas for (1) are derived, which involve nodes non-symmetrically located with respect to the mid-point of the interval  $[\underline{x}_n, \overline{x}_n]$ . In § 1, by the method of undetermined coefficients, are derived two-, three-, four-

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ACCESSION NR: AR4039852

and five-term formulas with one abscissa not determined in advance. In obtaining the remainder terms, Milne's method is used. The formulas derived are, respectively, of order four, five, six and seven, in accuracy with respect to  $h$ . In § 2 multiple nodes are used; the author derives three-, four- and five-term integration formulas, involving the derivative of the integrand. Using Hermite polynomials, in § 3, the author derives numerical integration formulas in which the nodes to be determined are of multiplicity two, while the fixed ones are simple. The formulas derived are of accuracy order five, six, seven and eight with respect to  $h$ . In § 4 are derived formulas in which two of the nodes to be determined are of multiplicity two, while the others are fixed and simple. The given formulas are of accuracy order seven and eleven with respect to  $h$ . All the formulas derived are given with remainder terms. In § 5, the author uses a theorem given by V. I. Krylov in proving the convergence and stability of the formulas presented.

Yu. Shakhov

DATE ACQ: 15May64

SUB CODE: MA

ENCL: 00

Card 2/2

TSKHADAYA, F.G.

Numerical solution of a quasi-linear hyperbolic system of  
partial differential equations. Trudy Vych.tsentra AN Gruz.  
SSR 2:29-46 '62. (MIRA 16:1)  
(Differential equations--Numerical solutions)



Def. at  
Tbilisi State U.

და სისტემის დიფერენციალური განტოლების ან.ჩ. О прокатываемом шаром по плоскости аналитической функции комплексной переменной и некоторые ее приложения. 1952. 38 с. (Пр. ТГУ, т. 32, 1954).  
 Заг. 1953, 254.  
 706. ნაკვთაძე სტეფანოსტე ფიქსიკანა ნაშრომები მათემატიკის დარგში (სტატიები, ანთოლოგია). ტ. 1, 1941.1. ტ. 2, 1942.1. ტ. 3, 1943.1. ტ. 4, 1944.1. ტ. 5, 1945.1. ტ. 6, 1946.1. ტ. 7, 1947.1. ტ. 8, 1948.1. ტ. 9, 1949.1. ტ. 10, 1950.1. ტ. 11, 1951.1. ტ. 12, 1952.1. ტ. 13, 1953.1. ტ. 14, 1954.1. ტ. 15, 1955.1. ტ. 16, 1956.1. ტ. 17, 1957.1. ტ. 18, 1958.1. ტ. 19, 1959.1. ტ. 20, 1960.1. ტ. 21, 1961.1. ტ. 22, 1962.1. ტ. 23, 1963.1. ტ. 24, 1964.1. ტ. 25, 1965.1. ტ. 26, 1966.1. ტ. 27, 1967.1. ტ. 28, 1968.1. ტ. 29, 1969.1. ტ. 30, 1970.1. ტ. 31, 1971.1. ტ. 32, 1972.1. ტ. 33, 1973.1. ტ. 34, 1974.1. ტ. 35, 1975.1. ტ. 36, 1976.1. ტ. 37, 1977.1. ტ. 38, 1978.1. ტ. 39, 1979.1. ტ. 40, 1980.1. ტ. 41, 1981.1. ტ. 42, 1982.1. ტ. 43, 1983.1. ტ. 44, 1984.1. ტ. 45, 1985.1. ტ. 46, 1986.1. ტ. 47, 1987.1. ტ. 48, 1988.1. ტ. 49, 1989.1. ტ. 50, 1990.1. ტ. 51, 1991.1. ტ. 52, 1992.1. ტ. 53, 1993.1. ტ. 54, 1994.1. ტ. 55, 1995.1. ტ. 56, 1996.1. ტ. 57, 1997.1. ტ. 58, 1998.1. ტ. 59, 1999.1. ტ. 60, 2000.1. ტ. 61, 2001.1. ტ. 62, 2002.1. ტ. 63, 2003.1. ტ. 64, 2004.1. ტ. 65, 2005.1. ტ. 66, 2006.1. ტ. 67, 2007.1. ტ. 68, 2008.1. ტ. 69, 2009.1. ტ. 70, 2010.1. ტ. 71, 2011.1. ტ. 72, 2012.1. ტ. 73, 2013.1. ტ. 74, 2014.1. ტ. 75, 2015.1. ტ. 76, 2016.1. ტ. 77, 2017.1. ტ. 78, 2018.1. ტ. 79, 2019.1. ტ. 80, 2020.1. ტ. 81, 2021.1. ტ. 82, 2022.1. ტ. 83, 2023.1. ტ. 84, 2024.1. ტ. 85, 2025.1.

63J  
Dissertation for degree of  
Candidate Mathematical Sciences



MINKIN, V.I.; ARDASHEV, B.I.; TSKHADADZE, K.A.

Joint condensation of diarylamines with isovaleraldehyde.  
Zhur.ob.khim. 30 no.5:1647-1649 My '60. (MIRA 13:5)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.  
(Isovaleraldehyde) (Amines) (Condensation products)

SHOSTAK, F.T.; SEREDIN, B.I.; LYUBMAN, N.Ya.; TSKHAY, A.A.

Ion-cosmosis method of demineralization. Trudy Inst. khim. nauk AN  
Kazakh. SSR 11:164-169 '64. (MIRA 17:11)

ACCESSION NR: AP4038444

8/0294/64/002/002/0294/0296

AUTHOR: Tskhay, N. S. (Moscow)

TITLE: Method of determining the kinetic temperature of a gas

SOURCE: Teplofizika vy\*sokikh temperatur, v. 2, no. 2, 1964, 294-296

TOPIC TAGS: spectral measurement, line broadening, damping, Doppler-effect, temperature measurement, kinetic temperature

ABSTRACT: A method is proposed for determining the kinetic temperature from the contour of the spectral line. The contour is governed simultaneously by two factors -- Doppler effect and damping due to collisions and radiation. Spectral lines whose contours are governed by these two factors can be found in sufficient amounts in spectra of gases over a wide range of pressures and temperatures, so that the use of these lines for the determination of the temperature of a gas is of great practical interest. It is assumed that the Doppler

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ACCESSION NR: AP4038444

effect and the damping act independently, so that the broadening due to each effect can be determined by measuring the relative intensity at the two points of the line contour and solve a system of two equations which characterize the relative intensity at these points. The equations can be readily solved with an electronic computer with an accuracy greatly exceeding the accuracy with which the contour of the spectral line is plotted. When an M-20 computer is used, the computer time amounts to 5 minutes. In view of the high accuracy of the machine computation, the accuracy with which the gas temperature is determined is in practice governed by the accuracy of the experimental measurements of the coordinates of the spectral-line contour. Orig. art. has: 6 formulas and 1 table.

ASSOCIATION: None

SUBMITTED: 25Nov63

SUB CODE: OP, TD

DATE ACQ: 09Jun64

NR REF SOV: 001

ENCL: 00

OTHER: 001

Card: 2/2

TSKHAI, N.S. (Moskva)

Method for determining the kinetic temperature of a gas. Teplofiz.  
vys. temp. 2 no.2:294-296 Mr-Ap '64. (MIRA 17:6)

TSO, S., kand. tekhn. nauk; PETROVICH, J.I.; TSKHAY, S.M.

Use of linear programming in determining the optimum variant  
of the distribution of air. Vest. AN Kazakh. SSR no. 8: 92-  
94. Ag '64. (MIRA 17:11)

LENNAI, V.A.; GEL'D, G.V.

Effect of screening and value of the overlap of d-orbitals  
on some properties of equiatomic oxides and carbides of  
Ti, V, and Nb. Zhur. strukt.khim. 5 no. 2575-220 Moscow, 1964.  
(M 24 113)

1. Grafskiy Hillar AN SSSR, Institute Khimii, Gverdlova.

ТСКХАКАЯ, А. Д.

797. Панавашиа Вазуг Георгиевич. Исследования в области метеорологии для определения сезонных изменений в атмосфере. 1953, 86 с., 32 рис. (Инт. геофиз. АН Груз. ССР). Заг. 1954, 11.11.

798. Панавашиа Вазуг Георгиевич. Хиритеристика климата в Грузии с точки зрения динамики атмосферных процессов. Заг. 1948, 20 з.

799. Панавашиа Георгий Меликсетович. Применение метода перемыканий в изучении структуры турбулентности в атмосфере. 1940, 24 с. [4] Вкл. л. II. 1941. 20 с. [2] Вкл. л. Некоторые особенности строения атмосферы в Грузии при дождевой структуре турбулентности. III. 1942, 42 с. [5] Вкл. л. черт.

Обоснование применимости метода перемыканий в изучении турбулентности в атмосфере. Сува-Омперети-IV. 1942, 36 с., 9 Вкл. л. черт.

Интерпретация голографов в атмосфере. 1939 г. V. 1943, 37 с., [4] вкл. л. черт. (Инт. Физика и геофизика АН Груз. ССР). Заг. 1943, 18 б.

800. Савадзе Иосиф Иванович. Исследования в области метеорологии. К вопросу радиационного баланса в атмосфере. 1950, 10 с., 19 рис. (Инт. Физика и геофизика АН Груз. ССР). Заг. 1950, 6 с.

801. Собаская Анна Мария. Селекционно-генетический анализ разнородных популяций в черноморском побережье Грузии (район Сурами) в зимы 1948—1951 гг. 1951, 257 с. (Инт. геофиз. АН Груз. ССР). Заг. 1955, 23.11.

802. Сувадзе Георгий Константинович. Влияние физических факторов на образование и структуру снежного покрова Закавказья. 1947, 10 с. Главног. Кавказского фронта. Заг. 1947, 9.12.

803. Хведелидзе Натела Степановна. Исследования в области метеорологии. 1954, 10 с. Заг. 1956, 23 б.

804. Цацава Александр Давидович. Голограф 3—Р. По наблюдениям в атмосфере. 1940, 61 с., с илл. Заг. 1941, 21.

805. Чатурвашиа Леван Степанович. Исследования в области метеорологии. 1948, 26 б.

806. Чавчава Шалва Манвелович. Солнечная радиация в атмосфере над горными вершинами. 1949, 165 с., с рис. Заг. 1949, 24 б.

807. Чавчава Шалва Манвелович. К вопросу радиационного баланса в атмосфере. 1950, 10 с., 19 рис. (Инт. Физика и геофизика АН Груз. ССР). Заг. 1950, 10.12.

700  
Dissertation for degree of  
Candidate Physical-Mathematical Sciences

Def. at  
Tbilisi State U.

TSKHAKAIA, Aleksandr Davidovich, 1902 ju. uc.

The Tabatskuri earthquake on the night of 7-8 May 1940. Tbilisi, 1945. 24 p. map.  
(Akademia nauk Gruzinskoi SSR, Tiflis. Geofizicheskii institut. Tsentral'naja  
seismicheskaja stantsiia. Bulletin, V. 12. no. 3. Suppl.) At head of title: E. Biuz  
i A. Tskhakaia. Tabatskurekoe zometriatsenie...1945. (Card 2)

TSKHAKAYA, A. D.

TSKHAKAYA, A. D. "The Gudamkar earthquake of 15 August 1947", (based on macroseismic data), Kvart. seysm. byulleten' (Akad, nauk Gruz. SSR, Tsentr. seysm. stantsiya In-ta fiziki i geofiziki), XIV, No. 1-4, 1949, p. 101-16, (Resume in Georgian).

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).

TSKHAKAIA, A. D.

A study of the development of seismology in Georgian SSR Tbilisi, Izd-vo Akademii nauk Gruzinskoi SSR, 1950. 64 p. (51-29050)

QE536. T7

1. Seismology - Georgia (Transcaucasia)
2. Tiflis. Tsentral'naia seismicheskaia stantsiia.

ALIYEV, G.A.; SEMENOV, P.G.; BULANZHE, Yu.D.; ROZOVA, Ye.A.; DUBROVSKIY, V.G.;  
ARKHANGEL'SKIY, V.M.; TSKHAKAYA, A.D.; NAZAROV, A.G.

Comments of participants of the meeting. *Biul. Sev. po seism. no. 1:85-92*  
'55. (Seismology) (MIRA 9:9)

TSKHAKAYA, A.D.

Seismicity of Akhalkalaki uplands. Izv.AN SSSR. Ser.geofiz. no.1:  
105-108 Ja '56. (MIRA 9:3)

1. Akademiya nauk Gruzinskoy SSR, Institut geofiziki.  
(Akhalkalaki uplands--Earthquakes)

TSKHAKAYA, A.D.

Review of Caucasian earthquakes occurring in 1951.  
geofiz. AN Gruz.SSR 15:111-125 '56.  
(Caucasus--Earthquakes)

Trudy Inst.  
(MLRA 10:7)

TSKHAKAYA, D.G.

Georgian time measures and calculation methods used for the Georgian  
solar calendar. Trudy Mat.inst.AN Gruz. SSR 22:301-317 '56.  
(Time) (MLRA 10:3)

49-6-9/21

TSKHAKAYA, A D

AUTHOR: Tskhakaya, A.D.

TITLE: Seismic activity and work of the seismic stations in the Caucasus in 1954 and 1955. (Seysmicheskaya aktivnost' i rabota seysmicheskikh stantsiy Kavkaza za 1954-1955).

PERIODICAL: "Izvestiya Akademii Nauk, Seriya Geofizicheskaya" (Bulletin of the Ac.Sc., Geophysics Series), 1957, No.6, pp. 785-788 (U.S.S.R.)

ABSTRACT: In the Caucasus 22 seismic stations were in operation during 1954 and 1955, see maps Figs. 1 and 2, pp.786-787. A relatively dense network of seismic stations exists only in the southern part of Georgia; these encompass the seismically active zone of the Dzhavaketsk mountain region. In this region the epicentres are determined with a high accuracy, the error does not exceed 5 to 10 km, and it is possible to record weak earthquakes. In other locations weak earthquakes are recorded in single cases by individual stations at epicentral distances of up to 50 km, such stations exist in Kirovabad, Abastumani, Makhach-Kala and Zugdidi. The stations in the Caucasus are equipped only with general type apparatus and only in rare cases did they participate in determining the epicentres of earthquakes in the Caucasus zone. The author regrets that Turkey and

Car

SUBM. ASSOC.

Card 1/2

AVAILAB.

exception of trans-Caucasia. epicentres determined only in this region. stations of weak earthquakes, all of which are Slavic. Geophysics, Acad. Sci. USSR, Institut Geofiziki, Georgia. of Congress, SSSR, Institut Geofiziki, Georgia.

TSKHAKAYA, A.D.

The Gegchkori earthquake in 1957. Izv. AN SSSR. Ser. geofiz. no.8:990-999 Ag '57. (MLRA 10:8)

1. Akademiya nauk Gruzinskoy SSR, Institut geofiziki. (Georgia--Earthquakes)

TSKHAKAYA, A.D.

Seismicity of Dzhava (Akhalkalaki) upland and neighboring regions.  
Trudy Inst. geofiz. AN Gruz. SSR 16:177-219 '57. (MIRA 11:6)  
(Dzhava region--Seismology)

SOV/169-59-2-1165

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 2, p 20 (USSR)

AUTHOR: Tskhakaya, A.D.

TITLE: The Seismism<sup>v</sup> of the Dzhavakhetskiy (Akhalkalakskiy) Highlands and of the Adjacent Regions

PERIODICAL: Tr. In-ta geofiz. AS GruzSSR, 1957, Vol 16, pp 177 - 219

ABSTRACT: The author gives a characteristic of the seismic activity of the Dzhavakhetskiy (Akhalkalakskiy) volcanic highland and the adjacent regions on the basis of the macroseismic information from the last years and the instrumental observations during 1912 - 1953. Disastrous earthquakes are known here since the IX-th century, and in the highland itself since the IX-th - XIII-th centuries. The most intense earthquake during the last time was in 1899. The Akhalkalakskiy highland differs from the other regions of the Caucasus by the greater frequency of earthquakes. The greatest number of epicenters in the chart of epicenters of the highland for 1932 - 1954 is concentrated in the south-western part, in the Bogdanevskiy region, over

Card 1/2

SOV/169-59-2-1165

The Seismism of the Dzhavakhetskiy (Akhalkalaskiy) Highlands and of the Adjacent Regions

an area of but 1,500 km<sup>2</sup>. The depth of the foci is up to 30 km. The energy index amounts from 3 to 9 (in Mega-Joule), in the majority of cases it amounts to 3. A territorial connection between the concentrations of weak and intense earthquakes is not observed.

A. Levitskaya

Card 2/2

TSKHAKAYA, A.D.; SIKHARULIDZE, D.I.

Seismism of the region of Sochi and Krasnaya Polyana earthquakes  
of December 21 and 27, 1955. Soob. AN Gruz.SSR 18 no.3:287-292  
Mr. 57. (MIRA 10:7)

1. Akademiya nauk Gruzinskoy SSR, Institut geofiziki, Tbilisi.  
Predstavleno akademikom V.D. Kupradze.  
(Krasnaya Polyana--Earthquake, 1955)  
(Sochi--Earthquake, 1955)

TsKHAKAYA, A.D.

3(10)

PHASE I BOOK EXPLOITATION

SOV/3034

Akademiya nauk SSSR. Sovet po seysmologii

Byulleten'; Krasnopolyanskoye zemletryaseniye, 1955 g., No. 5 (Bulletin; Krasnaya Polyana Earthquake, 1955, No. 5) Moscow, 1958. 62 p. 1,200 copies printed.

Resp. Ed.: S.V. Medvedev, Doctor of Technical Sciences; Ed. of Publ. House: N.V. Shebalin.

PURPOSE: This booklet is intended for scientists working in the field of geophysics and seismology.

COVERAGE; This bulletin contains three studies of the Krasnaya Polyana earthquake which occurred on December 21-27, 1955. The studies include data gathered by the expedition organized by Ye.F. Savarenskiy, Chairman of the Committee on Seismology of the Academy of Sciences, USSR, in January-February 1956. The members of the expedition included A.Z. Kats of the Geophysical Institute AN SSSR; A.D. TsKhakaya of the Geophysical Institute of the Academy of Sciences of the Gruzinskaya SSR; and Sh.A. Dzhabua, A.L. Churayan, and A.N. Safaryan of the Building Institute

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SOV/169-59-5-4464

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 5, p 27 (USSR)

AUTHORS: Dzhabua, Sh.A., Kats, A.Z., Safaryan, A.N., Tskhakaya, A.D.,  
Churayan, A.L.

TITLE: The Earthquake of Krasnaya Polyana of December 21 - 27, 1955,  
and Its Aftereffects

PERIODICAL: Byul. Soveta po seysmol. AS USSR, 1958, Nr 5, pp 3 - 34

ABSTRACT: In January - February 1956, the authors of the article in question led the study of the aftereffects of two earthquakes which took place in December 21 - 27, 1955. The expedition inspected 18 populated localities, among them Krasnaya Polyana, Adler, Sochi, Gagra, Khosta, Matsesta. The results of the inspection of damaged buildings and structures in the various localities are cited and an evaluation of intensity of the earth-quake is given. On the basis of the instrumental records of the seismic stations and the facts obtained by macroseismic observations, the epicenter zone of the earthquake of December 21 - 27, 1955, occurred in the region of Krasnaya Polyana. The

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The Earthquake of Krasnaya Polyana of December 21 - 27, 1955, and Its After-effects

power of the earthquake in the epicenter is seven marks. With increasing distance from the epicenter, the power rapidly decreases that testifies the shallow location of the focus. The macroseismic region of the earthquake extends from Gagra to Lazarevskaya along the seacoast and to Kurdzhinovo in the Southern Caucasus. The macroseismic radius amounts to 65 - 75 km when assuming as epicenter Krasnaya Polyana. The influence of the characteristics of the ground and of the relief on the force of shock is studied and brief information is given on the geology and on the seismostatistics of the region. ✓

N.A. Vvedenskaya

Card 2/2

TSKHAKAYA, A.D.; SIKHARULIDZE, D.I.

Earthquake in upper Mingrelia, Dec. 25, 1955. Soob. AN Gruz. SSR  
20 no.1:27-34 Ja '58. (MIRA 11:6)

1. Institut geofiziki AN GruzSSR, Tbilisi. Predstavleno akademikom  
K.S. Zavriyevym.

(Mingrelia--Earthquakes)

RUBINSHTEYN, M.M.; TSKHAKAYA, A.D.

Seismotectonic characteristics of the Dzhavakhtskaya  
(Akhalkalaki) Upland. Trudy Inst.geofiz.AN Gruz.SSR 17:161-175  
'58. (MIRA 13:4)

1. Geologicheskiy institut AN GruzSSR, Tbilisi i Institut  
geofiziki AN GruzSSR, Tbilisi.  
(Akhalkalaki region--Seismology--Observations)

SOV/49-59-9-12/25

AUTHORS: Tskhakaya, A. D. and Maysuradze, G. M.

TITLE: Achigvara Earthquake on the 5th June 1958

PERIODICAL: Izvestiya Akademii nauk, SSSR, Seriya geofizicheskaya, 1959, Nr 9, pp 1386-1392 (USSR)

ABSTRACT: The earthquake occurred at 2 h 5 m 57 s GMT. Its epicentre was found at  $42^{\circ} 42'N$ ,  $41^{\circ} 39'E$ , (Fig 3). The force was determined as 7 and the intensity  $M$  as  $4\frac{3}{4}$ . The focus was estimated 10 km deep. During the following days some 21 epicentres of the secondary shocks were recorded (Fig 4). According to the Seismic Atlas of the USSR, the area had only a few earthquakes of  $M \leq 2$  and force about 5. Therefore, it is proposed that an appropriate adjustment should be made for this region in the Seismic Zoning Chart of the USSR. There are 4 figures, 2 tables and 12 Soviet references.

ASSOCIATION: Akademiya nauk Gruzinskoy SSR. Institut geofiziki  
(AS Gruzinskaya SSR . Institute of Geophysics)

SUBMITTED: March 27, 1959  
Card 1/1

S/519/60/000/008/010/031  
D051/D113

AUTHORS: Byus, Ye.I.; Tskhakaya, A.D.

TITLE: Seismological principles of seismic zoning of the Caucasus

SOURCE: Akademiya nauk SSSR. Sovet po seysmologii. Byulleten', no. 8, Moscow, 1960. Voprosy seysmicheskogo rayonirovaniya, 99-104

TEXT: The authors give a historical account of seismological research and observations in the Caucasus and discuss seismic phenomena and problems in connection with a map showing the areas of earthquakes of intensities 7 and 8 and the epicenters of heavy earthquakes which occurred in the Caucasus from 1912 to 1957. A history of the development of seismological research in the Caucasus from the opening of the first observatory at Tiflis to the recording of recent earthquakes, is given. In the 1930's, the problem of seismic zoning of the Caucasus region arose, due mainly to large-scale construction development in the area. The growth of this problem resulted in all available data on Caucasian earthquakes being summarized in the first and second sections of a monograph by Ye.I. Byus (Ref. 6: Seysmicheskiye

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Seismological principles...

S/519/60/000/008/010/031  
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usloviya Zakavkaz'ya. Ch. I-III [Seismic Conditions of Transcaucasia. Parts I-III], Tbilisi, 1948-55). It is stated that the network of regional stations in the Caucasus, initiated in 1932, has been gradually enlarged and, since 1950, equipped with new highly sensitive seismographs. On the basis of data obtained without instruments, various macroseismic maps of the Caucasus have been compiled, of which the map of the zones of earthquakes of intensities 7 and 8, superposed in this article on a map of epicenters, is of special importance for seismic zoning. This map was compiled as a result of statistical generalization of heavy and destructive earthquakes occurring over a long period of years. Some zones became distinct only in recent years, and in some cases they were determined according to the data of isolated points. The epicenters of the map included in this article, determined using data obtained by instruments, have an intensity of  $M \geq 4$ . Up to 1953, the data of the map of the Caucasian zone of the Atlas of Seismicity of the USSR served as a basis for the compilation of the map of epicenters; since 1953, the data of seismograms for the Seismicheskiy byulleten' Kavkaza (Seismic

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Seismological principles...

S/519/60/000/003/016/031  
D051/D113

Bulletin of the Caucasus) were used. The authors give a brief survey of Caucasian earthquakes and also discuss problems of earthquake frequency and the distribution of seismic centers in this region. In their concluding remarks, the authors state that the data now available on the seismicity of the Caucasus area, although incomplete, suffices as a basis for seismic zoning in the region and for the building of earthquakeproof structures. Russian scientists I.V. Mushketov, A.P. Orlov, and A. Morits are mentioned in the article. There are 1 figure and 15 Soviet references. ✓

ASSOCIATION: Institut geofiziki AN Gruzinskoy SSR (Institute of Geophysics of the Academy of Sciences Gruzinskaya SSR)

Card 3/3

TSKHAKIYA, A.D.

Earthquakes in the Caucasus during 1957-1958. Trudy Inst. geofiz.  
AN Gruz. SSR 19:109-123 '60. (MIRA 14:9)  
(Caucasus--Earthquakes)

S/049/61/000/007/002/005  
D263/D306

AUTHOR: Tskhakaya, A.D.  
TITLE: Some results of the study of earthquakes in Caucasia  
PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya geofizicheskaya, no. 7, 1961, 1031-1036

TEXT: The considered seismic zone is between  $38^{\circ}$  -  $46^{\circ}$ N and  $38^{\circ}$  -  $54^{\circ}$ E. The epicenters of earthquakes registered by stations in that zone were determined under the direction of Ye. F. Savarenskiy for the period 1912-1953 and from 1954-1959 by the laboratory staff of regional seismology at the Institute of Geophysics, Academy of Sciences, Georgian SSR. Positions of epicenters of magnitude  $M \geq 4$  are given. The densities of epicenters are also given. The relation between the number of earthquakes and their magnitude is given as  $1gN=0.741M + 4.048$ . There are 3 figures, 2 tables and 13 Soviet-bloc references.

Card 1/2

Some results of the study ...

S/049/61/000/007/002/005  
D263/D306

ASSOCIATION: Akademiya nauk Gruzinskoy SSR. Institut geofiziki  
(Academy of Sciences, Georgian SSR, Institute of  
Geophysics)

SUBMITTED: October 28, 1960

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Card 2/2

TSKHAKAYA, A.D.

Depth of earthquake focuses in the Caucasus. Izv. AN SSSR.  
Ser.geofiz. no.5:577-584 My '62. (MIRA 15:3)

1. AN Gruzinskoy SSR, Institut geofiziki.  
(Caucasus—Seismology)

TSKHAKAYA, A.D.; LEBEDEVA, T.M.; AKHALBEDASHVILI, A.M.

The Madatapa earthquake of December 1959. Trudy Inst. geofiz.  
AN Gruz. SSR 21:77-84 '63. (MIRA 18:12)

L 00740-67 ENT(1) GD/GW

ACC NR: AT6017666 (A)

SOURCE CODE: UR/0000/65/000/000/0158/0163

AUTHOR: Tskhakaya, A. D.

ORG: Institute of Geophysics, AN Georgian SSR (Institut geofiziki AN Gruzinskoy SSR) 28  
04

TITLE: Establishing the seismic character of the region of construction of the Ingursk hydroelectric station

SOURCE: Soveshchaniye po voprosam proyektirovaniya i stroitel'stva arochnykh plotin. Zugdidi, 1962. Arochnoye plotinostroyeniye (Arch dam construction); materialy soveshchaniya. Moscow, Izd-vo Energiya, 1965, 158-163

TOPIC TAGS: earthquake, seismology, civil engineering, hydroelectric station

ABSTRACT: A discussion is given on the seismic characteristics of the region of construction of the Ingursk hydroelectric facility. The region in question is in Western Georgia, that is, the territory of the Georgian SSR which is located to the west of the 43° meridian of east longitude. Data are presented on the frequency of epicenters by year from 1930. Since 1955 intense seismic activity has appeared in Western Georgia and on the Black Sea coast of the Caucasus. Eighteen tremors have been recorded in the region since 1955, ranging in intensity from 6 to 9 on the seismic scale. The year, date, time, intensity, and location of the tremors since 1930 are tabulated. Fifteen strong (range 4--6) tremors have been recorded in a radius of 50 km from the arch dam site during the years 1930--1961. The historical data on

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ACC NR: AT6017666

tremors in the region are plotted in a form indicating the frequency by "microarea" within the region in question. These data are used in an attempt to estimate the probability of future earthquake action. In view of the possible catastrophe that would result if the Ingursk facility should be ruptured, the author recommends that the design strength of the dam be set in anticipation of an earthquake intensity of 9. Orig. art. has: 4 figures and 1 table.

SUB CODE: 13,02/SUEM DATE: 29Sep65

Card 2/2 *LL*

15-1957-10-13845

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,  
p 68 (USSR)

AUTHOR: Tskhakaya, A. D.

TITLE: A Survey of Earthquakes in the Caucasus in 1951 (Obzor  
zemletryaseny Kavkaza za 1951 god)

PERIODICAL: Tr. In-ta geofiz. AN GruzSSR, 1956, vol 15, pp 111-125

ABSTRACT: A map is given showing the distribution of the epicenters of 157 earthquakes which occurred in 1951 in the central part of the Caucasus (chiefly in Georgia). The locations of the epicenters were established by instrumental data. In Georgia the epicenters are concentrated chiefly in the Akhalkalaskoye highland (82 epicenters) and in the principal Caucasian Range in the region of Kazbek and the Borbalo Mountains (50 epicenters). Because of the activity of a number of permanent and temporary stations, the epicenters in the Akhalkalaskoye highland were located with an accuracy

Card 1/2

15-1957-10-13845

A Survey of Earthquakes in the Kavkaz (Caucasus) in 1951

of five to ten km. Isoseismal maps are given for the earthquakes of January 17 (in the Bogdanovskiy rayon), March 3 (in the Kaspi region), and November 2 (in the upper reaches of the Alazani River at Omalo), and information is presented on the great number of points showing the intensity values for these earthquakes, which were used in preparing the maps. The focal depths of the first two earthquakes were 10 km. and less than 25 km. Data are included on the seismic activity of the Borbalo region since the 16th century.

Card 2/2

P. N. Kropotkin

TSKHAKAYA, A.D.; MAYSURADZE, O.M.

The Adzhar-Guriya earthquake of May 20, 1959. Trudy Inst.  
geofiz. AN Gruz. SSR 21:61-75 '63.

(MIRA 18:12)

TSKHAKAYA, A.D.

Seismicity of the region of construction of the Inguri  
hydroelectric power station. Trudy Inst. geofiz. AN Gruz.  
SSR 21:85-96 '63. (MIRA 18:12)

TSKHAKAYA, A.D.

Seismic activity of the Caucasus during 1959-1960. Trudy  
Inst. geofiz. AN Gruz. SSR 22:85-98 '64.

(MIRA 18:12)

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ACC NR: AP6002023

SOURCE CODE: UR/0185/65/010/012/1277/1288

AUTHOR: Tskhakaya, D. D.

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ORG: Physicotechnical Institute, AN UkrSSR, Kharkov (Fizyko-tekhnichnyy instytut AN URSR)

TITLE: Compton scattering in a magnetic field

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 12, 1965, 1277-1288

TOPIC TAGS: Compton effect, photon scattering, resonance scattering, scattering cross section, dipole interaction, magnetic field

ABSTRACT: Compton scattering of <sup>21, 44, 55</sup>photons by a scalar charged particle in a magnetic field is considered. Starting with the interaction Hamiltonian, a general expression is obtained for the differential scattering cross section of unpolarized photons, and the resonance frequency is determined as a function of the oscillation quantum number. No account is taken of the spontaneous emission (natural width) or of the Doppler effect. The classical case of large oscillation quantum number is found to yield in the nonrelativistic case a cross section which coincides with the cross section obtained in the dipole approximation for the scattering of electromagnetic waves by a particle with

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ACC NR: AP6002023

charge e situated in a magnetic field. Author is grateful to S. Peletminsky for discussing the results. Orig. art. has: 20 formulas.

SUB CODE: 20/ SUBM DATE: 20Jan65/ ORIG REF: 003/ OTH REF: 001

Card

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VVEDENSKAYA, N. A.; DZHANUZAKOV, K. D.; IODKO, V. K.; KONDORSKAYA, N. V.;  
LANDYREVA, N. S.; MISHARINA, L. A.; SULTANOVA, Z. Z.;  
TSKHAKAYA, A. D.; YURKEVICH, O. I.

Bulletin of strong earthquakes in the U.S.S.R. in 1959. Trudy  
Inst. fiz. Zem. no.22. Vop. inzh. seism. no.7:3-24 '62.  
(MIRA 15:10)

(Earthquakes)

TSKHAKAYA, A. D.

Some problems in the development of the net of seismic stations  
in the Caucasus. Trudy Inst. geofiz. AN Gruz. SSR 20:135-142  
'62. (MIRA 16:1)

(Caucasus—Seismology)

TOZHARAYA, D. G.

"Outline of the History of Mathematics in Georgia From Ancient Times to the Beginning of the Twentieth Century." Dr Phys-Math Sci, Tbilisi Mathematics Inst ineni A. N. Razmadze, Acad Sci Georgian SSR, Tbilisi, 1954. (KL, No 7, Feb 55)

SU: Sum. No. 631, 25 ug 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

TSKHAKAYA, D. G.

K voprosu o matematicheskikh znaniyakh v Gruzii v XVII v. Tbilisi Trudy Matem. in-ta an Gr SSR, 9 (1941), 207-215.

Trigonometriya, Narodov Elizhnego vostoka ob odnom iz gruzinskikh pamyatnikov v astronomicheskoy Literature. Tbilisi, Trudy Matem. in-ta AN GR SSR, 13 (1944), 219.

So: Mathematics in the USSR, 1917-1947

edited by Kurosh, A. G.

Markushevich, A. I.

Rashevskiy, P. K.

Moscow-Leningrad, 1948

ZHGENTI, V.S.; KHVOLES, A.R.; TSKHADAYA, F.G.

Some problems of the geometry of the middle surface of an arch dam.  
Soob. AN Gruz. SSR 32 no.2:289-292 '63.

(MIRA 1821)

1. Vychislitel'nyy tsentr AN Gruzinskoy SSR, Tbilisi. Submitted  
January 23, 1963.

TSKHAKAYA, G.A.

Replacing high-speed nonsynchronous motors by low-speed synchronous ones as grinder drive. Tsement 27 no. 2:26 Mr-Ap '61.  
(MIRA 14:5)

1. Kaspkiy tsementnyy zavod.  
(Crushing machinery--Electric driving)

TSKHAKAYA, K. E.

"Tissue ontogeny in monocotyledonous plants."

report submitted for 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

State Univ, Tbilisi.

TSKHAKAYA, K.M.

Late results of myoplasty in paralysis of the musculus quadriceps femoris in patients with sequelae of poliomyelitis. Ortop., travm. i protez. 24 no.10:28-30 0 '63. (MIRA 17:5)

1. Iz Tsentral'nogo instituta travmatologii i ortopedii (dir. - prof. M.V.Volkov). Adres avtora; Moskva A-299, Novaya Ipatovka, d. 8., Tsentral'nyy institut travmatologii i ortopedii.

TSKHAKAYA, M.I., prof.

Closed fractures of the calcaneum. Ortop.travm. i protez. 18 no.6:  
34-38 N-D '57. (MIRA 11:4)

(CALCANEUM, fract.  
closed fract.)